the State of California are pretty largely united in an effort to make this plan a success. You will probably find that your own favorite doctor is a member of this plan, because out of 6,600 doctors in the state society, 5,500 have joined this plan.

This organization is operated upon the insurance principle and it costs those who join it very little for the immense service given, because the only overhead is a 20 per cent operating cost. This cost is diminishing in proportion as the plan grows in

Three different types of policies may be had. One insures against the cost of surgical procedures only and pays the cost of surgery and hospital if a surgical procedure is found to be necessary. This contract is primarily for large industrial groups. At a less cost a policy is issued which covers hospitalization only, but hospitalization for any type of illness. The third type of policy provides full coverage for medical care and hospital costs. At present 30,000 people in our State are cared for within this plan. As the public is learning of it, the curve of growth is sharply upward. Membership is limited to employed groups of persons. However, those who have salaries in excess of \$3,000 annually are not permitted to join, though many such would like to do so. The Federal Government has recently shown its approval of the plan and its confidence in it by arranging to pay part of the premium for those farm families who wish to join it and who are already under the wing of the Federal Farm Security Administration. This is the contribution of the practicing physicians of the State of California to the social security of the workers of our State. It is a genuine contribution. No one is getting rich as a result of the operation of this plan. Each doctor and hospital is paid for work actually done and, except for the very small overhead for clerical work, all income is devoted to this purpose. Such fees are small but adequate and secure, and the doctors are thrilled to see that by means of this plan the most complete and modern medical service can be extended to workers everywhere throughout our State.

This is but one of the many efforts being made to protect the American way of life, while we prepare to preserve and defend it in whatever part of the world it may be challenged.

1893 Wilshire Boulevard.

## RÔLE OF THE DOCTOR OF MEDICINE IN THE LIFE AND HEALTH OF THE AMERICAN CITIZEN\*

By RUTH KLIEWER Bakersfield

SINCE man's emergence upon the earth, illness has been a major component of his personality has been a major component of his personality. Disease has run the gamut of life with him. Medicine, trailing disease, has metamorphosed from the

weird rituals of our early ancestors down the centuries to the present highly scientific application of surgery and chemotherapy in conquering the microorganisms which prey on human life. Consequently, in view of the ages which medicine has spanned, in the light of man's successes and failures in his struggle to survive, the rôle of the doctor of medicine in the life and health of the American citizen has been, is, and will continue to be one of unequalled significance.

Today, as we study the records of progress made in the various industries and professions, note the changes in social structure, and speculate on future achievements, we cannot exclude from our survey the obvious fact that the greater part of America's survival and continued development must be credited to the profession which has kept us, as individuals, alive and able-bodied: the medical doctors. More remarkable even, is the fact that they have made, during the last two and one-half decades, more contributions to the preservation of life than in all the years previous.

Let us picture, for a moment, the health situation in America at the beginning of the twentieth century. The United States was just settling back from three centuries of wars and pioneering. Conquest of unexplored territory occupied the lives of old-timers and immigrants. The great expanses which separated towns, settlements, and homesteads, plus primitive methods of travel, made communication difficult. Due to the high frequency of illness from perils of pioneering and constant exposure to reinfection from Old World immigrants, an ignorance of pestilences, the obscurity of disease, the scarcity of doctors, and the superstitions upon which aid was administered, the system of living was precarious. Sanitation was a term foreign to the populace. Approaching symptoms of disease eluded recognition. Subjecting herself and her child to the hazards of unhygienic surroundings and inadequate accommodations, the prospective mother was confined in her own home and was delivered by a midwife. New-born generations were fed on adult foods from the very start, and a harvest of 1,500,000 American citizens was reaped by Death in 1900, nearly one-third of which died of diseases seldom occurring today, so well are their causes and treatment known.

Thus we, as part of a human race afflicted since its origin by a myriad of diseases, and made stupid and incompetent thereby, and devoid of scientific treatment for our afflictions, presented to the medical doctor less than half a century ago a problem of stupendous propensity.

With the birth of cities, the West conquered, state governments established, the nation unified, the institution of more efficient communication, the successful establishment of public education, the extension of mechanical inventions, and the complex social situations created by the spirit of the new era and the increasing population, came an opportunity for more Americans to devote their energies to physiological, chemical, and bacterial research. Then, from the few general laws of science known and accepted, and a less number of

<sup>\*</sup> Prize essay in contest open to high school and junior college students, sponsored by the Committee on Public Health Education of the California Medical Association, May, 1941.

Essay prize was awarded to Miss Ruth Kliewer, a student in the Bakersfield Junior College, Bakersfield, California.

significant discoveries to draw from, medicine, as we know it today, began to change like a kaleidoscope, and the physician assumed a new rôle in American life: a responsibility for the health of his countrymen as a unit—a duty of finding disease, treating it, and eliminating it from among the perils we combat. The vision and toil of a few exceptionally outstanding medical men, and those who followed them through the pioneering phases of modern medicine, sincerely devoted to the finest that the term "Medical Profession" implies, must be credited for a generous portion of what progress has been made, what increased health fortifications we now have: For the decrease of infant mortality, and a corresponding extension of the average life.

Therefore, the rôle of the doctor of medicine in the life and health of our American citizenry must be presented in two parts: The significance of his services since 1900, and his future contributions to national health.

I

Today the annual number of deaths is approximately what it was forty years ago, but the population is 56,000,000 greater than in 1900. This means that the death rate has dropped 60 per cent in less than half a century; an excellent indication of victory over our microscopic enemies. It also means that today there are 72 more persons in every 1,000 of our population who are escaping death from disease, illness, or accident than there were four decades ago, or that in a city of 100,000 population, you have 715 more chances to live this year than you would have had in 1900. From this it is evident that the illnesses leading to death have been greatly controlled by scientifically applied medicine. Typhoid epidemics which occurred yearly, are today not listed by the census bureau as a major cause of death. In 1900, typhoid caused 36 deaths per 100,000 population; today it is responsible for less than 2. Diphtheria, which then claimed in death 43 of every 100,000 citizens, today claims only 2. Four decades ago pneumonia killed one in every 500 persons. Today it takes one in 1,500. Cholera, typhus, smallpox, yellow fever, and malaria have also fallen before the relentless onslaughts of our nation's medical men. Tuberculosis is now only one-fourth the White Plague that it was forty years ago! In four years, our doctors have so changed our attitude towards social diseases, and have persisted so intensely in the fight for control and potential elimination of syphilis and gonorrhea from our bodies, that together with the recent new, quick, and effective methods of treatment, and with premarital examinations required in at least eighteen states, we stand an encouraging chance of freeing ourselves from a disease which has ravaged man's body and degenerated his brain since before the Christian era. Infant deaths due to congenital malformations and diseases have been reduced by one-half, and the majority of today's prospective mothers are cared for in hospitals or maternity homes. Diets for babies and children are now given special attention, and child supervision by a physician is gaining in popularity among the younger parents who realize that

parenthood does not endow them with the training, knowledge, experience, and resources of the doctor. These accomplishments have been due in part to research, of course, but due to the conclusions of such research as have been dispensed to the public by the medical practitioner.

With increased successes and the voluntary incorporation of extended responsibilities, the private practice of medicine has shifted its emphasis from illness to health and correct hygienic supervision of the healthy. Various methods have been employed in this process. Public interest and support of health programs have been acquired by a more appealing dissemination of information, through more, far-reaching channels of propaganda. Doctors of the American Medical Association pioneered this educational aspect through the establishment of a bureau of health and public instruction and publication of the magazine, Hygeia. Our physicians have organized and published information in bulletins, books, pamphlets, and speakers' bureaus, and have sponsored radio programs. Realizing that man cannot be forced against his will to accept what is best for him, the medical profession has been so successful in making us desirous of their services that the dangerous situation has now arisen in regard to how their services can be made available to all of our populace who demand them! So now our doctors have the medical-economic responsibility of providing a system whereby every American citizen can receive adequate medical care regardless of his financial status.

Already many experiments are under way, one of the most prominent of which is the California Physicians' Service under the chairmanship of Dr. Ray Lyman Wilbur. Indicative of the attitude of the medical profession toward these changes in methods of practice, is a statement made by Doctor Wilbur, who said, in regard to members of group service: "Our sympathy, our sense of 'fair play,' and our desire for self-protection and self-projection all unite in demanding that we reject emphatically any suggestion that these people should be given an inferior service—a service that we cannot label 'good in quality and reasonably adequate in quantity."

The evolution of any system, if inclusive and successful enough to make adequate medical services available to all our people, will perhaps, in itself, be regarded as the greatest contribution that has yet been made to our lives and health, when our civilization is viewed by historians of the future.

Also as a principal step in the maintenance of public health and continued conquest of disease, and essential to early discovery of any disease processes, our doctors instituted a plan of periodic physical examination, and are striving to develop a public view that one person's health or illness is everybody's business. Therefore, in comparing attitudes of today with those of the past few decades, we find a shift from that of extreme indifference, ignorance, and superstition in matters regarding disease, to one of great enlightenment and constantly expanding health consciousness on the part of the American public. This is a remote

indication that the relief dispenser may also play a significant part in helping us as a nation to catch up with the lag we have allowed to occur in selfcontrol, until it equals scientifically the degree of control we have attained over our environment.

The work of our National Health Department, administered by medical doctors and directed by a Surgeon General, cannot be ignored. This particular medical group has perhaps been more responsible for the success of other practitioners than we realize, for to them full credit must be given for guarding us from exposure to diseases carried to our shores by international travelers, and by those immigrants seeking residence here. These public doctors have the task of:

- Medically inspecting and examining all arriving aliens.
  - 2. Preventing interstate spread of disease.
  - 3. Suppressing epidemics.
- 4. Investigating causes and methods of preventing disease.
- 5. Supervising and controlling the manufacture and sale of all biologic products used in prevention and treatment of disease.
- 6. Maintaining facilities for confinement and care of drug addicts.
- 7. Collecting, compiling, and publishing information regarding the prevalence of disease in the United States and in foreign countries.

During the past year, by examination of applicants for immigration visas, our medical officers protected us from contact with 13,500 afflicted with a condition or disease likely to affect their ability to earn a living. Another 22,000 alien passengers and 1,000 seamen were found to be afflicted with some mental or physical defects of disease.

And finally, in philanthropic, nonmedical organizations devoted to promoting health, expenditures are seldom made without the advice and recommendations of a general advisory committee consisting of competent, qualified doctors.

Thus our medical doctors have lobbied for public health, and thus have they rapidly renovated our attitudes concerning self-preservation and physical well-being.

II

Vast territory has been covered in the four decades just passed, but so boundless is the frontier that the challenge of the future presents incalculable possibilities.

Illness has been drastically reduced, but there are still 6,000,000 men, women, and children unable to work, attend school, or pursue other ordinary activities on any one average winter day, on account of illness, of a gross physical impairment resulting from disease, or accidents. A score of dreadful diseases are now well conquered, but nearly one-half of the 6,000,000 are suffering from chronic diseases; about 1,500,000 from colds, influenza, and pneumonia; 2,500 from acute infectious diseases, and appendicitis. For every death reported, there occur sixteen cases of illness disabling for a week or longer. On a per capita basis, every man, woman and child in the nation's popula-

tion suffers at least ten days of incapacity annually from illness.† More than a million of us are made inefficient by hookworm and other parasites, while 10,000,000 are victims of syphilis, and 60,000 of our newly born, future citizens are infected with it. What a laboratory for those whose occupation is to discover disease, treat it, and cure it, if possible!

In addition to this, 1,500,000 persons in the United States are mentally defective. From 1,500,-000 to 2,000,000 others are diseased. Six out of ten hospital beds are occupied by mental patients, besides those cared for in outside institutions.<sup>‡</sup> With the possible effects of disease upon the nerves and brain cells becoming more and more apparently a contributory factor to many forms of insanity, mental health also is now shifting from the field of pure philosophy and psychology into the realms of medicine and the hands of the medical doctor.

Thus, it is obvious that beyond the realm of superficial progress in American economic and cultural phases, true progress must be credited to the part that the doctor of medicine has played and will continue to play in the life and health of American citizens. The future holds for him adventure, exploration, discovery in increasing magnitude. His rôle is one that will not be finished until the last citizen is free of disease, and the sources of infection are eliminated. His rôle in the future will be greatly influenced by the extent to which we project all that has been accumulated, through medical research and application, into terms of human value and happiness for that part of life that we and coming generations yet shall live. If we accept that responsibility, our doctors' efforts and sacrifices may be turned toward other achievements now not dreamed of.

We are paying a terrible price in terms of life and happiness for those maintained in institutions. Our institutions need a medical aspect. Jails, orphanages, old peoples' homes, soldiers' homes, insane asylums, all afford well-supplied laboratories for research in pathology, bacteriology, therapeutics, and biogenetics. It may even come about that in the future, if the doctor is not hampered, he, instead of emotionally unjust juries, will pass the sentence upon our criminals.

The doctor of medicine assists us into life, protects us from ourselves while we live, extends our span of life, and administers relief at death.

And so, as the evolution of man continues, if the United States survives the conflicts of nations to rise above the petty dabble of narrow minds, and reaches, in the centuries ahead, these social ideals (and even if not), the profession of medicine, those who lead it, and those who follow it, will have made the most constructive and enduring contributions to the lives and health of America's citizens that this era has received.

In conclusion then, as I study our social problems and those things which cause them, I am convinced that this campaign for health in the United

<sup>†</sup> National Institute of Health and Public Health Service, 1938.

<sup>‡</sup> Science Monthly, 47:550-551.

States, this effort on the part of doctors to show us a way to a biologic understanding of ourselves, is more important to us now and in the future than any other national or international situation, because physical health and mental well-being are indispensable if our civilization continues to progress. Then, if a certain degree of national mental wellbeing can be attained in future years, together with a more relaxed pace of living, a more peaceful community life will necessarily evolve. And it is even feasible that only through universal physical and mental health can the prophet's dream of a war-free world materialize.

The American doctor of medicine, then, dedicating his mind and strength to the prevention of premature organic deterioration in his fellow citizens, and to intercepting processes of deterioration in those victimized by disease, with ever increasing emphasis upon both, particularly the first, shall continue to be, but in a greater capacity, the Moses who leads his followers from the wilderness of physical devastation to a land more promising of organic protection, physical health, and mental superiority through knowledge and hygienic living. 315 Holtby Road.

#### REFERENCES

Statistics: World Almanac, 1940; American Year Book, 1940; Reports of the Committee on the Costs of Medical

Magazines: Hygeia, 1940; American Journal of Public Health; Scientific American, 1940; Science News Letters;

Science Monthly.

Books: "The Fight for Life," De Kruif; "20th Century Psychiatry," William White; "Our Children in a Changing World," Erwin Wexberg; "A Short Introduction to the History of Human Stupidity," W. B. Pitkin; "The March of Medicine," Dr. Ray Lyman Wilbur; "Your Diet and Your Health," Fishbein; "The Patient's Dilemma," Cabot.

# CLINICAL NOTES AND CASE REPORTS

## OAK POISONING: CAUSE-REMOVING TREATMENT

By Edwin F. Patton, M. D. Los Angeles

MOST prevailing treatments of oak and ivy poisoning are directed toward (1) relieving the discomfort till the disease runs its course, and (2) developing neutralizing substances in the blood of the victim.

Another, and preferable approach, (3) removing the cause, is here described because it is so simple and so effectual in cutting short the affliction.

The cause, an oleoresinous plant exudate, acts as an irritant as long as it is in contact with the skin, even in exceedingly minute quantity. This substance is not soluble in water; hardly at all in alcohol; is partially emulsifiable in soapsuds; is freely soluble in certain cleaning agents, notably benzine.

By mopping up small areas in series with individual benzine-soaked pledgets of cotton or small rags, discarding each pledget or rag after use, and continuing until all affected surface has been so treated, a good deal of the offending irritant can be picked up and removed. A little gentle scrubbing makes the removal more complete. Of course, any previously applied coating of calamine, or other medicament, which merely covers the oleoresin and binds it into intimate contact with the skin, must be removed to get at the underlying toxin. On fairly fresh lesions this treatment is not particularly painful. After the skin is broken, the treatment becomes increasingly heroic—yet justifiable because of results.

After a session with benzine the part treated should be left exposed and fanned till the benzine is completely evaporated. Then a thorough lathering and hot showerbath (not tub bath) may follow. Then, if itching continues, full strength Dobell's solution may be daubed on ad libitum and allowed to dry, or may be used as a wet compress.

The whole process may have to be repeated a second or perhaps a third time, at intervals of a few hours, before enough of the oleoresin has been removed to allow healing; but when this is accomplished, regardless of the previous duration of the disease, twelve to thirty-six hours will see the healing stage well under way.

Sedatives, however, may have to be used during

the treatment period.

3875 Wilshire Boulevard.

### HIPPOCRATES' APHORISMS\*

By Moses Scholtz, M. D. Arcadia

Section Five (Continued)

- A prolapsed womb With suppuration, Leads to sinus And ulceration.
- A male fetus is located Most often to the right, While the female is found rather Moored to the left side.
- A free expulsion of the placenta Can be produced with greater ease, If, with the mouth and nostrils shut, The woman can be caused to sneeze.
- 50. To stop the menses in a woman One should apply cups to the breasts. The largest cups 're the most effective— So the experience attests.
- In a state of pregnancy The mouth of the womb is closed.
- 52. If in a pregnant woman flabby breasts With milk secretion overflow, The fetus's weak, but firm breasts Suggests a healthy embryo.

<sup>\*</sup> For other aphorisms, see California and Western Medicine, March 1940, page 125; April 1940, page 179; May 1940, page 231; July 1940, page 35; August 1940, page 85; September 1940, page 130; December 1940, page 272; January 1941, page 27; February 1941, page 82; March 1941, page 124; April 1941, page 229.